

REMARKS

Claims 1-2 and 4-20 remain pending in the present application. Claims 1, 2, 4-6 are amended, claim 3 is canceled without prejudice or disclaimer of the subject matter contained therein, and claims 15-20 are new. Support for the amendment to claims 1, 2, 4-6 and new claims 15-20 can be found, *inter alia*, on pages 2 and 3 of the specification.

Claim 1 has been revised to correct a grammatical informality. This change is not related to patentability.

Rejections Under 35 U.S.C. § 112

Claims 2 and 3 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Applicants respectfully traverse.

With regard to claim 2, Applicants assert that the rejection is now moot given the amendment to claim 2 removing the “channel condition” language.

With regard to claim 3, Applicants assert that the rejection is now moot given the cancellation of claim 3.

Applicants respectfully request that the 35 U.S.C. §112 rejection of claims 2 and 3 be withdrawn.

Exemplary Embodiment of the Claimed Invention

To aid the Examiner's understanding of the present invention, an exemplary embodiment of the present invention will be briefly described.

In an exemplary embodiment of the claimed invention as disclosed, *inter alia*, in Figs. 1-4 and page 2, lines 1-14 of the specification, when a mobile station 60 initially makes contact with a base station 50, the mobile station 60 transmits channel conditions, the mobile station's degree of mobility (whether the mobile station 60 is standing still, moving slowly or moving at a relatively high speed) and the transmit configurations supported by the mobile station 60. Additionally, the base station 50 transmits its capabilities to mobile stations on a channel such as a paging channel or synchronization channel where it indicates the types of transmit configurations that are available. In an embodiment, based on the information provided by the mobile station 60 and the capabilities of the base station 50, the base station 50 selects one of four different transmit configurations for communications with the mobile station 60. The selected transmit configuration is communicated to the mobile station 60 using a control channel such as a paging channel or synchronization channel.

35 U.S.C. § 102

Claims 1, 6-8 and 10-14 are rejected under 35 U.S.C. § 102(a) as being anticipated by Motorola (EP 0966 125 A1). Applicants respectfully traverse.

With regard to claim 1, Applicants assert that Motorola fails to disclose receiving, from a mobile station, mobile station capability information including a plurality of the mobile station's capabilities as recited in claim 1. Instead, Motorola (Col. 2, lines 5-14, and Col. 3, lines 40-55) discloses feedback from a mobile terminal 108 data relating to performance of signals used to instruct a base station 102 as to the weights and delays to apply within a antenna weighting and selection unit. This is different from the claimed invention in that Motorola deals with signal performance information sent from a mobile terminal. Claim 1, on the other hand, recites receiving, from a mobile station, mobile station capability information including a plurality of the mobile station's capabilities. Based on the foregoing, Applicants assert that each and every element of the invention is not disclosed by Motorola.

For at least this reason, Applicants respectfully request that the art ground of rejection be withdrawn.

Claims 6-8 and 10-14 are allowable for their own merits and because they depend from independent claim 1.

Claim 1 is also rejected under 35 U.S.C. § 102(b) as being anticipated by DeSantis et al. (U.S. Patent No. 5,628,052). Applicants respectfully traverse.

With regard to claim 1, Applicants assert that DeSantis et al. fails to disclose receiving, from a mobile station, mobile station capability information including a plurality of the mobile station's capabilities as recited in claim 1. Instead, DeSantis et al. (col. 2, lines 35-57) disclose a mobile unit that receives

control messages and a data message, and analyzes the control messages to identify a best antenna. The mobile unit then transmits to the base station a new antenna request identifying the best antenna in an uplink control slot of a frame. The uplink control slot is associated with the particular one of the base station antennas. This is different from the claimed invention in that DeSantis et al. deals with a mobile station providing best antenna information sent to a base station and not mobile station capability information as recited in Claim 1. Based on the foregoing, Applicants assert that each and every element of the invention is not disclosed by DeSantis et al.

For at least this reason, Applicants respectfully request that the 35 U.S.C §102(b) rejection be withdrawn.

35 U.S.C. § 103

Claims 4-5 are rejected under 35 U.S.C. §103(a) as being unpatentable over Motorola in view of Wiedeman et al. (U.S. Patent 5,859,879). Applicants respectfully traverse.

As discussed above, Motorola fails to disclose or suggest receiving, from a mobile station, mobile station capability information including a plurality of the mobile station's capabilities as recited in claim 1.

Wiedeman et al. is directed to multipath communication system optimization. Wiedeman et al. is silent as to mobile station capability information and instead discloses (Col. 2, lines 59 carrying over to Col. 3, line 11) providing a mechanism to limit future transmissions of signal copies over a

particular communication path based on signal quality. Therefore, Wiedeman et al. can not disclose or suggest receiving, from a mobile station, mobile station capability information including a plurality of the mobile station's capabilities as recited in claim 1. Claim 1 is not rendered obvious to one skilled in the art by Motorola in view of Wiedeman et al.

Claims 4 and 5 are allowable for their own merits and because they depend from independent claim 1. Accordingly, Applicants respectfully request that the Examiner withdraw the art grounds of rejection.

Claim 9 is rejected under 35 U.S.C. §103(a) as being unpatentable over Motorola in view of Allpress et al. (U.S. Patent 6,392,988 B1).

As discussed above, Motorola fails to disclose or suggest receiving, from a mobile station, mobile station capability information including a plurality of the mobile station's capabilities as recited in claim 1. Allpress et al. is directed to a transmitter architecture employing space time spreading and orthogonal transmit diversity techniques. Allpress et al. is silent as to mobile station capability information. Therefore, Allpress et al. can not disclose information including a plurality of the mobile station's capabilities as recited in claim 1. Claim 1 is not rendered obvious to one skilled in the art by Motorola in view of Allpress et al.

Claim 9 is allowable for its own merits and because it depends from independent claim 1. Accordingly, Applicants respectfully request that the Examiner withdraw the art grounds of rejection.

CONCLUSION

In the event that any outstanding matters remain pending in this application, Applicants request that the Examiner contact the undersigned to discuss such matters.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY, & PIERCE, P.L.C.

By

Gary D. Yacura
Reg. No. 35,416

P.O. Box 8910
Reston, Virginia 20195
(703) 668-8000

GDY/RFS:ewd